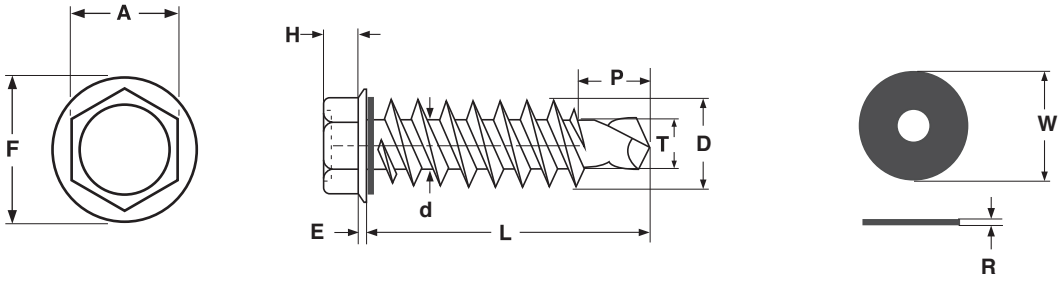
SELF-DRILLING

Unslotted Hex Flange with Rubber Washers



Hex Flange Unslotted Self-Drilling Screws

Nom Size & Thrds per Inch	A		H		F		E		R		W	P		T		D		d	
	Width Across Flats		Head Height (without Flange)		Flange Diameter		Flange Thickness		Rubber Washer Thickness		Rubber Washer Diam	Length of Drill Point		Point Diameter		Major Diameter		Minor Diameter	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Ref	Max	Min	Max	Min	Max	Min	Max	Min
10-16	.312	.305	.126	.114	.512	.492	.106	.087	.098	.087	.335	.264	.236	.157	.154	.189	.182	.141	.135
12-14	.312	.305	.169	.157	.571	.551	.130	.110	.118	.106	.413	.335	.295	.185	.181	.215	.209	.164	.157
1/4-14	.375	.367	.169	.157	.571	.551	.130	.110	.118	.106	.441	.366	.335	.219	.215	.246	.237	.192	.185

Tolerance on Length	Up to 3/4": +0 / -0.03	Over 3/4" to 1.5": +0 / -0.05	Over 1.5": +0 / -0.06

Description	An unslotted hex head tapping screw with a conical flange and free spinning, captive rubber washer. The underside of the flange is undercut, creating a space for the rubber washer to be seated. Screw has spaced threads and a drill point which drills its own hole.
Applications/ Advantages	When properly installed, this fastener: (a) offers protection against leakage, and (b) minimizes damage to the mating surface caused by contact with a steel washer. Sealing screws may be used to attach roofing or metal walls to steel frames. Ruspert finish makes these screws a more economical option than stainless for resisting corrosion. Consult a self-drilling screw selection chart for the correct size.
Material	***Screw:*** AISI 1016-1024 or equivalent steel; ***Rubber washer***: Style 40 EPDM sheet
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 625°F minimum.
Case Hardness	***Screw***: Rockwell C52 -58 ***Rubber Washer***: Shore A 65 - 75 (Durometer scale)
Case Depth of Screw	***No. 10 & 12 diameters:*** .004 - .009 ***1/4" diameter and larger:*** .005 - .011
Core Hardness of Screw	Rockwell C32 - 40 (after tempering)
Plating	Screws typically have a Silver Ruspert finish with a 1,000-hour salt-spray rating for resisting red rust.